



322536

Date Issued May 30, 1985
Date Effective May 30, 1985

BEFORE THE
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the matter of: : Director's Final Findings
RMI Company : and Orders
Sodium Plant
46 State Road
Ashtabula, Ohio :

Pursuant to Ohio Revised Code Section 6111.03(H), the Director of the Ohio Environmental Protection Agency (Ohio EPA) hereby makes the following Findings and issues the following Orders:

FINDINGS

1. The RMI Company (Sodium Plant), hereinafter referred to as "RMI", operates a wastewater treatment facility located at 46 State Road, Ashtabula, Ohio.
2. This facility discharges pollutants to Fields Brook via storm sewer.
3. RMI currently holds an effective NPDES Permit No. 3IE00012*AD (OH0002313) for the aforementioned discharge. The permit limits discharges of total residual chlorine (TRC) and total suspended solids (TSS) at monitoring point 3IE00012601 (effluent from Pond No. 5, the final stage of the process wastewater treatment system). The permit also requires monitoring of TSS and TRC at outfall 3IE00012001, the total plant effluent, which consists of sanitary wastewater, process wastewater, cooling water, and such natural waters as may be present.
4. RMI is not in compliance with its NPDES permit limitations at monitoring point 3IE00012601. Additionally, analytical data collected by RMI indicate that, on many occasions, considerable amounts of TRC may be present in the facility's cooling water, which does not pass through the process wastewater treatment system. Also, data collected by the company indicate that the total plant effluent usually contains a higher concentration of suspended solids than are present in the intake water.
5. RMI does not know the source of the TRC in the cooling water, or the reason for the higher TSS levels in the total plant effluent.
6. There is also some doubt as to the accuracy of the company's analytical data for TRC at outfall 001. Much or all of the apparent excess chlorine may have been due to inconsistent analytical techniques among monitoring stations.

FINDINGS (Cont.)

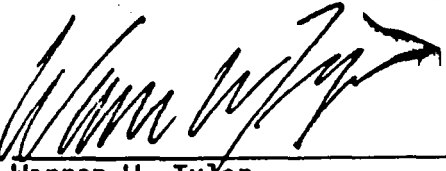
7. RMI is required by the NPDES permit No. 3IE00012*AD, Part II G, to determine the source(s) and amounts of excess TRC and TSS in its cooling water, and to determine the cost of eliminating or reducing excess TRC and TSS. RMI believes it may be feasible to control TRC to the extent that none will be detectable in the total plant effluent at outfall 001.
8. After RMI makes the determinations discussed in Finding No. 6, the Director will determine whether it is technically feasible and economically reasonable to require any further reductions in TSS and TRC discharges beyond those required by the permit and these Findings and Orders.
9. It is necessary that RMI comply with the final effluent limitations set forth in the NPDES permit No. 3IE00012*AD in order to safeguard the public health, safety and welfare.
10. It is technically feasible and economically reasonable to require RMI to comply with the following Orders:

ORDERS

1. Beginning immediately, and lasting until September 30, 1986, RMI shall comply with the interim effluent limitations and monitoring requirements contained in Attachment A (3IE00012001) and Attachment B (3IE00012601) of these Findings and Orders.
2. RMI shall attain compliance with the final effluent limitations at Station 3IE00012601 as expeditiously as practicable. In any event, RMI shall attain compliance not later than the dates developed in accordance with the following schedule:
 - A.
 - 1) Complete cleaning of Pond No. 2 by June 30, 1985.
 - 2) Complete cleaning of Pond No. 1 by October 31, 1985.
 - B.
 - 1) Submit to the OHIO EPA, Northeast District Office an application for Permit-to-Install and plans for a bisulfite addition system by June 30, 1985.
 - 2) Initiate construction by August 31, 1985.
 - 3) Complete construction and attain operational level by October 31, 1985.
 - C.
 - 1) Complete engineering and plan preparation for the overhaul of the catalytic conversion system by December 31, 1985.
 - 2) Issue purchase orders by June 30, 1985.
 - 3) Complete construction and attain operational level by September 30, 1986.

ORDERS (Cont.)

3. RMI shall report any noncompliance with Order 2, steps A, B and C, or the interim effluent limitations and monitoring requirements in Attachment A (3IE00012001) and Attachment B (3IE00012601) in accordance with Part III, Paragraph 12 of the NPDES permit No. 3IE00012*AD.
4. RMI shall comply with all terms and conditions of NPDES Permit No. 3IE00012*AD not modified by these Findings and Order.



Warren W. Tyler
Director

May 30, 1985
Date

INTERIM LIMITATIONS AND MONITORING REQUIREMENTS for Outfall 3IE00012001

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	UNITS	PARAMETER	Concentration Other Units(Specify)		Loading kg/day		Meas. Freq.	Sample Type
			30 day	7 day	30 day	7 day		
50050	MGD	Flow	-	-	-	-	Continuous	24 Hour Total
00010	°C	Temperature	-	-	-	-	Weekly	Grab
00530	mg/l	Total Suspended Solids (Net)	30	45	-	-	Weekly	24 Hour Composite
50060	mg/l	Total Residual Chlorine	0.2	0.6	-	-	Weekly	Grab
70300	mg/l	Total Dissolved Solids	-	2500	-	37,500	Weekly	24 Hour Composite

- The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored weekly by grab sample
- Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in PART II, OTHER REQUIREMENTS of NPDES Permit No. 3IE00012*AD.
- See PART II, OTHER REQUIREMENTS of NPDES Permit No. 3IE00012*AD.

Date Issued: May 30, 1985
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INTERIM LIMITATIONS AND MONITORING REQUIREMENTS for Outfall 3IE00012601

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
Reporting Code	UNITS	PARAMETER	Concentration		Loading		Meas. Freq.	Sample Type
			Other Units	(Specify)	kg/day			
			30 day	7 day	30 day	7 day		
50050 MGD		Flow	-	-	-	-	Weekly	24 Hour Estimate*
00010 °C		Temperature	-	-	-	-	Weekly	Grab
00530 mg/l		Total Suspended Solids	-	-	-	-	Weekly	24 Hour Composite
50060 mg/l		Total Residual Chlorine	-	-	-	-	Weekly	Grab
70300 mg/l		Total Dissolved Solids	-	-	-	-	Weekly	24 Hour Composite

2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored weekly by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in PART II, OTHER REQUIREMENTS of NPDES Permit No. 3IE00012*AD.
4. See PART II OTHER REQUIREMENTS of NPDES Permit No. 3IE00012*AD.

*Arithmetic average of 3 observations over an 8 hour shift.

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OEPA Permit No. 3IE00012*AD

Application No. OH0002313

Effective Date: May 29, 1985

Expiration Date: May 26, 1990

OHIO ENVIRONMENTAL PROTECTION AGENCY
AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq. hereinafter referred to as "the Act"), and the Ohio Water Pollution Control Act (Ohio Revised Code Section 6111),

RMI Company
Sodium Plant

is authorized by the Ohio Environmental Protection Agency, hereafter referred to as "Ohio EPA", to discharge from the wastewater treatment works located

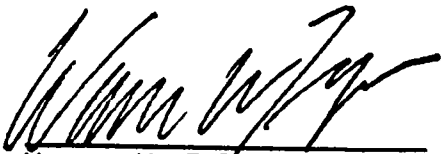
at 46 State Road, Ashtabula, Ohio

and discharging to ~~Fields Brook~~ via storm sewer

in accordance with the conditions specified in Parts I, II and III of this permit.

This permit is conditioned upon payment of applicable fees as required by Section 3745.11 of the Ohio Revised Code.

This permit and the authorization to discharge shall expire at midnight on the expiration date shown above. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information and forms as are required by the Ohio EPA no later than 180 days prior to the above date of expiration.



Warren W. Tyler
Director
Form EPA 4428

PART I, A - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3IE00012001. SEE PART II, OTHER REQUIREMENTS, for location of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
REPORTING Code	UNITS	PARAMETER	Concentration		Loading		Meas. Freq.	Sample Type
			Other Units	(Specify)	30 day	Daily		
50050	MGD	Flow	-	-	-	-	Continuous	24 Hour Total
70300	mg/l	Total Dissolved Solids	-	2500	-	37,500	Weekly	24 Hour Composite
00530	mg/l	Total Suspended Solids	-	-	-	-	Weekly	24 Hour Composite
50060	mg/l	Total Residual Chlorine	-	-	-	-	Weekly	Grab
00010	°C	Temperature	-	-	-	-	Weekly	Grab

2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored weekly by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
4. See PART II, OTHER REQUIREMENTS.

PART I, A - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3IE00012601. SEE PART II, OTHER REQUIREMENTS, for location of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
REPORTING Code	UNITS	PARAMETER	Concentration		Loading		Meas. Freq.	Sample Type
			Other	Units(Specify)	30 day	Daily		
50050	MGD	Flow	-	-	-	-	Weekly	24 Hour Estimate*
70300	mg/l	Total Dissolved Solids	-	-	-	-	Weekly	24 Hour Composite
00530	mg/l	Total Suspended Solids	30	70	-	-	Weekly	24 Hour Composite
50060	mg/l	Total Residual Chlorine	-	0.1	-	-	Weekly	Grab
00010	°C	Temperature	-	-	-	-	Weekly	Grab

2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored weekly by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
4. See PART II, OTHER REQUIREMENTS.

*Arithmetic average of 3 observations over an 8 hour shift.

PART I, A - FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date of this permit and lasting until the expiration date, the permittee is authorized to discharge in accordance with the following limitations and monitoring requirements from the following outfall: 3IE00012602. SEE PART II, OTHER REQUIREMENTS, for location of effluent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
REPORTING Code	UNITS	PARAMETER	Concentration		Loading		Meas. Freq.	Sample Type
			Other Units	(Specify)	kg/day			
			30 day	Daily	30 day	Daily		
50050 MGD	Flow		-	-	-	-	Daily*	24 Hour Total Est.
00310 mg/l	BOD ₅		30	45	-	-	Monthly	Grab
00083 Units	Color, Severity		-	-	-	-	Daily*	Observation
01330 Units	Odor, Severity		-	-	-	-	Daily*	Observation
01350 Units	Turbidity, Severity		-	-	-	-	Daily*	Observation

*Except days when the plant is not normally staffed. Report "AN" on the monthly report form for those days.

2. The pH (Reporting Code 00400) shall not be less than 6.5 S.U. nor greater than 9.0 S.U. and shall be monitored monthly by grab sample.
3. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in Part II, OTHER REQUIREMENTS.
4. See PART II, OTHER REQUIREMENTS.

PART I, B. - ADDITIONAL MONITORING REQUIREMENTS (cont)

1. Influent Monitoring. The permittee shall monitor the treatment work's influent wastewater at Station Number 3IE00012800 and report to the Ohio EPA in accordance with the following table. Samples of influent used for determination of net values or percent removal must be taken the same day as those samples of effluent used for that determination. See PART II, OTHER REQUIREMENTS, for location of influent sampling.

<u>EFFLUENT CHARACTERISTIC</u>			<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
REPORTING			Concentration		Loading		Meas.	Sample
Code	UNITS	PARAMETER	Other Units(Specify)		kg/day		Freq.	Type
			30 day	Daily	30 day	Daily		
00530	mg/l	Total Suspended Solids	-	-	-	-	Weekly	24 Hour Composite

2. Samples taken in compliance with monitoring requirements specified above shall be taken at Sampling Stations described in PART II, OTHER REQUIREMENTS.
3. See PART II, OTHER REQUIREMENTS.

PART I, C. - SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with specified effluent limitations in accordance with the following schedule:

A. Not Applicable

PART II, OTHER REQUIREMENTS

- A. Description of the location of the required sampling stations are as follows:

<u>Sampling Station</u>	<u>Description of Location</u>
3IE00012001	Manhole to 36" sewer prior to entering 48" State Road storm sewer
3IE00012601	Effluent from No. 5 pond prior to mixing with other process or cooling waters, or storm waters

- B. In addition to the reporting required by the paragraph entitled "REPORTING" in Part III, General Conditions, monitoring results obtained during each month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1 or T-40 as appropriate), to be received no later than the 15th of the next month. The original copy of the report form shall be signed and mailed to:

Ohio Environmental Protection Agency
Technical Records Section
Post Office Box 1049
Columbus, Ohio 43216

- C. This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under sections 301(b)(2) (C), and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

- (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- (2) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

- D. In the event the permittee's operation shall require the use of water treatment additives, written permission must be obtained from the Ohio Environmental Protection Agency. The permittee shall demonstrate that the use of the additive in the concentrations expected will not be harmful or inimical to aquatic life as determined by acute static bioassays.

PART II, OTHER REQUIREMENTS (cont.)

- E. Permit limitations may be revised in order to meet water quality standards after a stream use determination and waste load allocation are completed and approved. This permit may be modified, or, alternatively, revoked and reissued, to comply with any applicable water quality effluent limitations.
- F. For Station 3IE00012602 severity units are required for Turbidity, Odor, or Color. Report a number between 0 and 4 from the table below for each parameter.

REPORTED VALUE	SEVERITY DESCRIPTION	TURBIDITY	ODOR	COLOR
0	None	Clear	None	Colorless
1	Mild			
2	Moderate	Light Solids	Musty	Grey
3	Serious			
4	Extreme	Heavy Solids	Septic	Black

PART III - GENERAL CONDITIONS

1. DEFINITIONS

- A. 1. The "daily load limitations" is the total discharge by weight during any calendar day. If only one sample is taken during a day, the weight of pollutant discharge calculated from it is the daily load.
2. The "daily concentration limitation" means the arithmetic average of all the determinations of concentration made during the day. If only one sample is taken during the day its concentration is the daily concentration. Coliform bacteria limitations compliance shall be determined using the geometric mean.
3. The "7-day load limitation" is the total discharge by weight during any 7-day period divided by the number of days in that 7-day period that the facility was in operation. If only one sample is taken in a 7-day period the weight of pollutant discharge calculated from it is the 7-day load. If more than one sample is taken during the 7-day period the 7-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 7-day period and dividing by the number of days sampled.
4. The "7-day concentration limitation" means the arithmetic average of all the determinations of daily concentration limitation made during the 7-day period. If only one sample is taken during the 7-day period, its concentration is the 7-day concentration limitation for that 7-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.
5. The "30-day load limitation" is the total discharge by weight during any 30-day period divided by the number of days in the 30-day period that the facility was in operation. If only one sample is taken in a 30-day period the weight of pollutant discharge calculated from it is the 30-day load. If more than one sample is taken during one 30-day period the 30-day load is calculated by determining the daily load for each day sampled, totaling the daily loads for the 30-day period and dividing by the number of days sampled.
6. The "30-day concentration limitation" means the arithmetic average (weighted by flow) of all the determinations of daily concentration made during the 30-day period. If only one sample is taken during the 30-day period, its concentration is the 30-day concentration for that 30-day period. Coliform bacteria limitations compliance shall be determined using the geometric mean.
- B. "85 percent removal limitations" means the arithmetic mean of the values for effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period.
- C. 1. Absolute Limitations. Compliance with limitations having descriptions of "shall not be less than", "nor greater than", "shall not exceed", "minimum", or "maximum", shall be determined from any single value for effluent samples and/or measurements collected.
2. "Net concentration" shall mean the difference between the concentration of a given substance in a sample taken of the discharge and the concentration of the same substances in a sample taken at the intake which supplies water to the given process. For the purpose of this definition samples that are taken to determine the net concentration shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.
3. "Net load" shall mean the difference between the load of a given substance as calculated from a sample taken of the discharge and the load of the same substance in a sample taken at the intake which supplies water to given process. For purposes of this definition samples that are taken to determine the net loading shall always be 24-hour composite samples made up of at least six increments taken at regular intervals throughout the plant day.
- D. 1. When Quarterly sampling frequency is specified, the sampling shall be done in the months of March, June, August and December.
2. When a Yearly sampling frequency is specified, the sampling shall be done in the month of September.
3. When semi-annual sampling frequency is specified, the sampling shall be done during the months of June and December.
4. Winter shall be considered to be the period from November 1 thru April 30.

PART II, OTHER REQUIREMENTS (Cont.)

G. Best Management Plan

1. Permittee shall conduct a pollution control optimization study in accordance with the following schedule:
 - a. Within 1 month after the effective date of this permit, permittee shall begin a pollution control optimization study that shall:
 - 1) Identify all wastewater streams bearing TRC, their sources, and their routes of travel thru permittee's facilities and to Fields Brook.
 - 1i) Obtain sufficient accurate data to quantify TRC at the egress from Lagoon No. 5, at the egress from the catalytic converter system, and at the egress from outfall 001.
 - 1ii) Identify all wastewater streams bearing TSS, their sources, and their routes of travel thru permittee's facilities and to Fields Brook.
 - 1v) Obtain sufficient accurate data to quantify TSS at the egress from Lagoon No. 5, at outfall 001 and at a representative point of the water supply intake.
 - v) Determine whether permittee is adding TSS and TRC, as a result of its operations, to any wastewater stream that does not pass through its treatment system.
 - vi) Determine methods of reducing or eliminating the TSS and TRC identified under v), either by controlling TSS and TRC at the source, by treating TSS and TRC bearing wastewater streams, or by some other method.
 - vi1) Determine the cost of implementing the methods described under vi), and the time required for implementation.
 - b. Within 5 months of the effective date of this permit, permittee shall submit to the Ohio EPA a progress report on the status of the optimization study.
 - c. Within 9 months of the effective date of this permit, permittee shall complete the pollution control optimization study, and submit a report to Ohio EPA setting forth the results of the study.
2. Also within 9 months of the effective date of this permit, permittee shall, if it has determined under 1. a.v) that TSS and TRC are being added to any wastewater stream that does not pass through its treatment system, notify Ohio EPA and U.S. EPA whether it believes reduction or elimination of such TSS and TRC discharges is a reasonable requirement.
3. After reviewing the materials submitted under 1. and 2., the Director may modify this permit, and/or issue Findings & Orders, to require permittee to further reduce TSS and TRC levels in its effluent.